

REMARKS/ARGUMENTS

1.) Claim Amendments

The Applicants have amended claims 1 and 27-29. Accordingly, claims 1, 3-6, 11, 14-17, 22, and 27-29 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Claim Rejections – 35 U.S.C. § 103(a)

On page 2, paragraph 4, the Examiner rejected claims 1, 3, 5, 6, 11, 14, 16, 17, 22 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Choi (US 006295452B1) in view of Barnett, et al. (US005509051A). The Applicants have amended the claims to better distinguish the claimed invention from Choi and Barnett. The Examiner's consideration of the amended claims is respectfully requested.

Claim 1 has been amended and now recites that the first group of geographically related digital cells has a lower cost associated for establishing a radio link than the second group of geographically related digital cells. Additionally, claim 1 now recites means, responsive to the lower cost associated with the first group, for increasing the probability that the mobile station will establish a macro-diversity radio link with a digital cell in the first geographical area. Support for this amendment is found on page 6, line 33 to page 7, line 7 of the Applicants' specification.

Choi discloses a mobile communication system that supports soft handoff between switching stations. The Examiner stated that the network includes a plurality of base station controllers, switching stations and base stations which reads on the element "means for dividing the plurality of digital cells of the network into a plurality of groups." However, Choi does not teach or suggest that each group has a relative cost associated with establishing a radio link with a digital cell in a group. Additionally, Choi does not teach or suggest means, responsive to this cost differential, for increasing the probability of establishing a radio link with the cell having the lower cost. Choi merely disclose an existing mobile communication system employing macro-diversity.

Barnett discloses a system where each cell is assigned a measurement class (e.g., one to three) and a priority of one to eight. Additionally, one or more signal strength increments are added to the normalized neighboring cell's RF signal strength measurement. However, Barnett does not teach or suggest increasing the probability of establishing a radio link from a cell in a group having a lower cost. Furthermore, Barnett does not teach or suggest establishing a macro-diversity link, merely a single radio link.

The present invention provides the advantage of lowering costs associated with establishing a macro-diversity radio link. The Applicants' claimed invention includes establishing two groups, each having different costs. Responsive to these different costs, a higher probability is provided for establishing a macro-diversity radio link with the cell in the lower cost group. Neither Choi nor Barnett provides this distinction. Additionally, although Barnett provides a priority of connecting with a cell in a particular group, cost considerations are not used. Barnett merely provides an increase in signal strength increments to provide a priority of cells.

Claims 3, 5, 6, and 11 depend from amended claim 1 and recite further limitations in combination with the novel elements of claim 1. Therefore, the allowance of claims 1, 3, 5, 6, and 11 is respectfully requested.

In regards to claim 28, claim 28 has been amended and now recites dividing the plurality of digital cells of the network into two groups, wherein the first group of geographically related digital cells has a lower cost associated for establishing a radio link than the second group of geographically related digital cells. Additionally, claim 28 now recites, responsive to the lower cost associated with the first group, controlling the selection of macro-diversity cells to increase the probability that the mobile station will establish a macro-diversity radio link with a digital cell in the first group. Support for this amendment is found on page 6, line 33 to page 7, line 7 of the Applicants' specification.

As discussed above, the Applicants' claimed invention includes establishing two groups, each having different costs. Responsive to these different costs, a higher probability is provided for establishing a macro-diversity radio link with the cell in the lower cost group. Neither Choi nor Barnett provides this distinction. Additionally, although Barnett provides a priority of connecting with a cell in a particular group, costs

associated with a particular group of cells are not considered. Barnett merely provides an increase in signal strength increments to provide a priority of cells.

Claims 14, 16, 17 and 22 depend from amended claim 28 and recite further limitations in combination with the novel elements of claim 28. Therefore, the allowance of claims 14, 16, 17, 22, and 28 is respectfully requested.

On page 11, paragraph 3, the Examiner rejected claims 4 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Choi in view of Barnett as applied to claims 1 and 29 above, and further in view of Achour et al (WO 01/03464). The Applicants have amended the claims to better distinguish the claimed invention from Choi, Barnett, and Achour. The Examiner's consideration of the amended claims is respectfully requested.

Claim 1 has been amended and now recites that the first group of geographically related digital cells has a lower cost associated for establishing a radio link than the second group of geographically related digital cells. Claim 1 also recites means, responsive to the lower cost associated with the first group, for increasing the probability that the mobile station will establish a macro-diversity radio link with a digital cell in the first geographical area.

Choi does not teach or suggest that each group has a relative cost associated with establishing a radio link with a digital cell in a group. Additionally, Choi does not teach or suggest, responsive to this cost differential, increasing the probability of establishing a radio link with the cell having the lower cost.

Barnett does not teach or suggest increasing the probability of establishing a radio link from cell in a group having a lower cost. Furthermore, Barnett does not teach or suggest establishing a macro-diversity link, merely a single radio link. Likewise, Achour does not teach or suggest these missing elements.

On the other hand, the Applicant's claimed invention includes establishing two groups, each having different costs. Responsive to these different costs, a higher probability is provided for establishing a macro-diversity radio link with the cell in the lower cost group. Choi, Barnett, and Achour do not provide this distinction. Additionally, although Barnett provides a priority of connecting with a cell in a particular

group, cost considerations are not used. Barnett merely provides an increase in signal strength increments to provide a priority of cells.

Claim 4 depends from amended claim 1 and recites further limitations in combination with the novel elements of claim 1. Therefore, the allowance of claim 4 is respectfully requested.

The Applicants have also amended claim 28. Claim 28 now recites dividing the plurality of digital cells of the network into two groups, wherein the first group of geographically related digital cells has a lower cost associated for establishing a radio link than the second group of geographically related digital cells. Additionally, claim 28 now recites, responsive to the lower cost associated with the first group, controlling the selection of macro-diversity cells to increase the probability that the mobile station will establish a macro-diversity radio link with a digital cell in the first group.

The Applicants' claimed invention includes establishing two groups, each having different costs. Responsive to these different costs, a higher probability is provided for establishing a macro-diversity radio link with the cell in the lower cost group. Choi, Barnett, and Achour do not provide this distinction. Additionally, although Barnett provides a priority of connecting with a cell in a particular group, cost considerations are not used. Barnett merely provides an increase in signal strength increments to provide a priority of cells.

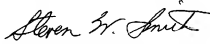
Claim 15 depends from amended claim 28 and recite further limitations in combination with the novel elements of claim 28. Therefore, the allowance of claim 15 is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1, 3-6, 11, 14-17, 22, and 27-29.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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